

WHAT IS CLAIMED IS:

1. A magnetic head apparatus comprising:
a load beam to which a slider is attached;
an elastically deformable portion that is
5 provided on said load beam so that a floating
structure that allows said load beam to swing is
formed about said elastically deformable portion;
and
a projection bulging from said load beam that
10 is adapted to function as a load generating
portion;
wherein a pressing load of said slider
against a recording medium is set by a pressure
applied to a top portion of said projection.

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2. A magnetic head apparatus comprising:
a load beam to which a slider is attached;
an elastically deformable portion that is
provided on said load beam so that a floating
20 structure that allows said load beam to swing is
formed about said elastically deformable portion;
and
a projection bulging from said load beam that
is adapted to function as a load generating
25 portion;
wherein said projection is adapted to
coincide with a balanced fulcrum about said load

beam; and

a pressing load of said slider against a recording medium is set by a pressure applied to a top portion of said projection.

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3. A magnetic head apparatus comprising:

a base plate adapted to be attached to a head arm;

a load beam that extends from the base plate;

10 a slider attached to said load beam;

an elastically deformable portion that is provided between said base plate and said load beam so that a floating structure that allows said load beam to swing is formed about said

15 elastically deformable portion;

a projection bulging from said load beam that is adapted to function as a load generating portion;

20 wherein said projection is adapted to coincide with a balanced fulcrum about said load beam;

a pressing load is applied to a surface of a recording medium via said slider; and

25 the pressing load of said slider against the recording medium is set by a pressure applied to a top portion of said projection.

4. A magnetic head apparatus according to any one of claims 1 to 3, wherein said projection bulging from said load beam sets such a limited area around said projection with which when an
5 impact within a predetermined value range is applied to said load beam in a vertical direction, deformation of said load beam would remain within elastic deformation range.

10 5. A magnetic head supporting mechanism comprising:

a magnetic head apparatus including a base plate and a load beam extending from the base plate;

15 a head arm attached to said base plate;
a slider attached to said load beam;
an elastically deformable portion provided between said base plate and said load beam, said elastically deformable portion being flexible so
20 that a floating structure that allows said load beam to swing is formed about said elastically deformable portion; and

a projection bulging from said load beam that is adapted to function as a load generating
25 portion;

wherein a pressing load is applied to a surface of a recording medium via said slider; and

the pressing load of said slider against the recording medium is set by a pressure applied to a top portion of said projection.

5 6. A magnetic head supporting mechanism comprising:

 a magnetic head apparatus including a base plate and a load beam extending from the base plate;

10 a head arm attached to said base plate;

 a slider attached to said load beam;

 an elastically deformable portion provided between said base plate and said load beam, said elastically deformable portion being flexible so
15 that a floating structure that allows said load beam to swing is formed about said elastically deformable portion; and

 a projection bulging from said load beam that is adapted to function as a load generating
20 portion;

 wherein said projection is adapted to coincide with a balanced fulcrum about said load beam;

 a pressing load is applied to a surface of a
25 recording medium via said slider; and

 the pressing load of said slider against the recording medium is set by a pressure applied to a

top portion of said projection.

7. A magnetic head supporting mechanism according to claim 5 or 6, wherein said projection
5 bulging from said load beam sets such a limited area around said projection with which when an impact within a predetermined value range is applied to said load beam in a vertical direction, deformation of said load beam would remain within
10 elastic deformation range.

8. A magnetic head supporting mechanism comprising:

a support arm swingable in a radial direction
15 of a recording medium and in a direction perpendicular to a recording surface of the recording medium with a bearing portion being a pivot;

a head attached to a lower surface of said
20 support arm at one end of said support arm;

elastic means provided on said support arm for imparting a biasing force in the direction toward said recording medium, to said support arm;
and

25 a projection bulging from said support arm adapted to be in point contact with a part of bearing portion;

wherein said support arm is adapted to be swingable in the direction perpendicular to the recording surface, with a point at which a top portion of said projection and said part of
5 bearing portion are in contact with each other being a balanced fulcrum.

9. A head supporting mechanism according to claim 8, wherein said projection bulging from said
10 arm sets such a limited area around said projection with which when an impact within a predetermined value range is applied to said support arm in a vertical direction, deformation of a portion in the vicinity of said projection
15 would remain within elastic deformation range.

10. A magnetic recording apparatus equipped with a magnetic head apparatus according to any one of claims 1 to 3.

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11. A magnetic recording apparatus equipped with a magnetic head supporting mechanism according to any one of claims 5, 6 and 8.